

What is Claimed is:

1. An upper slot motor assembly for a circuit breaker slot motor assembly, said upper slot motor assembly comprising:
  - a circuit breaker housing including a circuit breaker base having a first opening and a second opening; and
  - a rigid magnetic member having a bight portion, a first leg, and a second leg, the first leg of said rigid magnetic member engaging the circuit breaker base of said circuit breaker housing at said first opening, the second leg of said rigid magnetic member engaging the circuit breaker base of said circuit breaker housing at said second opening.
2. The upper slot motor assembly of Claim 1 wherein said rigid magnetic member comprises a plurality of laminated U-shaped plates resting in a U-shaped holder.
3. The upper slot motor assembly of Claim 2 wherein said U-shaped holder engages the circuit breaker base of said circuit breaker housing proximate the first and second opening of said circuit breaker base.
4. The upper slot motor assembly of Claim 2 wherein each of said laminated U-shaped plates includes a bight portion, and a pair of legs; and wherein said U-shaped holder includes a bight portion engaging the bight portion of each of said laminated U-shaped plates and a pair of legs engaging the pair of legs of each of said laminated U-shaped plates.
5. The upper slot motor assembly of Claim 4 wherein said laminated U-shaped plates include a first laminated U-shaped plate, a plurality of second laminated U-shaped plates and a third laminated U-shaped plate; wherein said U-shaped holder further includes a first U-shaped edge engaging the first laminated U-shaped plate and a second U-shaped edge engaging the third laminated U-shaped plate; and wherein said second laminated U-shaped plates are laminated between said first and third laminated U-shaped plates.
6. The upper slot motor assembly of Claim 5 wherein said first, second and third laminated U-shaped plates are made of steel.
7. The upper slot motor assembly of Claim 1 wherein the circuit breaker base of said circuit breaker housing includes a plurality of first interior walls

and a first exterior wall, which define the first opening of said circuit breaker base, and a plurality of second interior walls and a second exterior wall, which define the second opening of said circuit breaker base; and wherein the first and second legs of said rigid magnetic member engage said first and second interior walls, in order to reinforce the first and second exterior walls, respectively, of said circuit breaker base.

8. The upper slot motor assembly of Claim 7 wherein the first and second exterior walls have a first thickness; and wherein the first and second legs of said rigid magnetic member have a second thickness, which is greater than said first thickness.

9. The upper slot motor assembly of Claim 8 wherein the first and second interior walls have a third thickness, which is less than said first thickness.

10. The upper slot motor assembly of Claim 1 wherein said rigid magnetic member is made of steel.

11. The upper slot motor assembly of Claim 1 wherein the circuit breaker base of said circuit breaker housing is a molded circuit breaker base having the first and second openings molded therein.

12. The upper slot motor assembly of Claim 1 wherein the circuit breaker base of said circuit breaker housing is a molded circuit breaker base; wherein said circuit breaker housing further includes a molded cover having a third opening and a fourth opening; and wherein the first leg of said rigid magnetic member engages the molded cover of said circuit breaker housing at said third opening, and the second leg of said rigid magnetic member engages the molded cover of said circuit breaker housing at said fourth opening.

13. A circuit breaker comprising:  
a housing including a first opening and a second opening;  
at least one pair of separable contacts including a stationary contact and a movable contact disposed in said housing;  
an operating mechanism disposed in said housing and coupled to said separable contacts, said operating mechanism being structured to move said separable contacts between an open position and a closed position;

a trip mechanism disposed in said housing and coupled to said operating mechanism, said trip mechanism being structured to actuate said operating mechanism to open said separable contacts; and

a slot motor assembly disposed about said separable contacts, said slot motor assembly having an upper slot motor assembly and a lower slot motor assembly, said lower slot motor assembly being disposed below said stationary contact, said upper slot motor assembly being disposed above said movable contact, said upper slot motor assembly comprising a rigid magnetic member having a bight portion, a first leg, and a second leg, the first leg of said rigid magnetic member engaging said housing within said first opening, the second leg of said rigid magnetic member engaging said housing within said second opening.

14. The circuit breaker of Claim 13 wherein said rigid magnetic member comprises a plurality of laminated U-shaped steel plates resting in a U-shaped holder.

15. The circuit breaker of Claim 13 wherein said housing further includes a plurality of first interior walls and a first exterior wall, which define the first opening, and a plurality of second interior walls and a second exterior wall, which define the second opening; and wherein the first and second legs of said rigid magnetic member engage said first and second interior walls, in order to reinforce the first and second exterior walls, respectively.

16. The circuit breaker of Claim 15 wherein the first and second exterior walls have a first thickness; and wherein the first and second legs of said rigid magnetic member have a second thickness, which is greater than said first thickness.

17. The circuit breaker of Claim 15 wherein the first and second interior walls of said housing in combination with said first and second legs limit motion of the first and second exterior walls, respectively, of said housing during interruption of a power circuit when said separable contacts move from the closed position to the open position in response to said trip mechanism.

18. The circuit breaker of Claim 17 wherein the first and second interior walls of said housing in combination with said first and second legs enable the first and second exterior walls, respectively, of said housing to withstand pressure within said housing during interruption of said power circuit.

19. The circuit breaker of Claim 17 wherein said first and second legs provide a continuous bridge between the first and second interior walls of said housing and the first and second exterior walls, respectively, of said housing.

20. The circuit breaker of Claim 13 wherein said housing further includes a molded base having the first and second openings molded therein.

21. The circuit breaker of Claim 13 wherein said housing further includes a molded base and a molded cover having the first and second openings molded therein.

22. The circuit breaker of Claim 13 wherein said rigid magnetic member is installed in said circuit breaker after assembly of said trip mechanism and said operating mechanism in said housing.

23. An electrical switching apparatus comprising:  
a housing including a first opening and a second opening;  
separable contacts including a first contact and a second contact disposed in said housing;

an operating mechanism disposed in said housing and coupled to said separable contacts, said operating mechanism being structured to move said separable contacts between an open position and a closed position;

a trip mechanism disposed in said housing and cooperating with said operating mechanism to trip open said separable contacts; and

a slot motor assembly disposed about said separable contacts, said slot motor assembly having a first slot motor portion and a second slot motor portion, said first slot motor portion being disposed proximate said first contact, said second slot motor portion being disposed proximate said second contact, said first slot motor portion comprising a rigid magnetic member having a bight portion, a first leg, and a second leg, the first leg of said rigid magnetic member engaging said housing at said first opening, the second leg of said rigid magnetic member engaging said housing at said second opening.

24. The electrical switching apparatus of Claim 23 wherein said first and second openings have four sides; wherein said housing further includes three first interior walls and a first exterior wall, which define the four sides of the first opening, and three second interior walls and a second exterior wall, which define the

four sides of the second opening; and wherein the first and second legs of said rigid magnetic member include four sides, which engage the four sides of said first and second openings, in order to reinforce the first and second exterior walls, respectively.